REMARKS

These Remarks are in reply to the final Office Action mailed April 16, 2009. Claims 1-2, 5-12, 15-16 and 19-29 were pending in the Application prior to the outstanding Office Action. No claims are currently being amended, added or canceled (claims 3-4, 13-14 and 17-18 were previously canceled). Accordingly, claims 1-2, 5-12, 15-16 and 19-29 remain pending for the Examiner's consideration, with claims 1, 10 and 22 being independent. Applicants respectfully request that the outstanding rejections be reconsidered and withdrawn in view of the remarks below.

I.   Summary of Prior Art Claim Rejections

Claims 1-4, 7, 10-14, 19 and 22-29 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 4,841,828 to Suzuki (hereafter referred to as "Suzuki") in view of U.S. Patent No. 5,471,411 to Adams et al. (hereafter referred to as "Adams") and further in view of U.S. Patent No. 4,727,505 to Konishi et al. (hereafter referred to as "Konishi").

Claims 5, 6, 15 and 16 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Suzuki in view of Adams and Konishi and further in view of U.S. Patent No. 5,928,313 to Thompson (hereafter referred to as "Thompson").

Claims 8, 9, 20 and 21 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Suzuki in view of Adams and Konishi and further in view of U.S. Patent No. 6,411,333 to Auld et al. (hereafter referred to as "Auld").

(a discussion of the claims begins on the next page)

II.   Discussion of the Claims

Claim 1 is reproduced below for the convenience of the Examiner.

1.   A method comprising:

storing a plurality of independent sets of filter coefficients in a memory, wherein each set of filter coefficients defines a different polyphase filter function, wherein each of the different polyphase filter functions would result in at least some modifying of a signal if the signal were filtered in accordance with the polyphase filter function, and wherein each of the different polyphase filter functions would result in modifying of a signal in a different manner than the other polyphase filter functions;

selecting one of the sets of filter coefficients;

interpolating the selected set of filter coefficients to thereby produce interpolated selected filter coefficients; and

convolving the interpolated selected filter coefficients with an input signal to produce a filtered output signal that differs from the input signal regardless of which one of the sets of filter coefficients is selected.

Claim 1 includes the steps of "storing a plurality of independent sets of filter coefficients in a memory, wherein each set of filter coefficients defines a different polyphase filter function, wherein each of the different polyphase filter functions would result in at least some modifying of a signal if the signal were filtered in accordance with the polyphase filter function, and wherein each of the different polyphase filter functions would result in modifying of a signal in a different manner than the other polyphase filter functions" and "selecting one of the sets of filter coefficients". In the Office Action, it was asserted that Suzuki teaches the "storing" and "selecting" steps of claim 1. More specifically, the Office Action cited to the abstract, column 9, lines 12-20, and column 22, lines 40-58 of Suzuki teaches the "storing" step of claim 1. Further, it was asserted that column 23, lines 31-51 teaches the "selecting" step of claim 1. Applicants respectfully disagree, as explained below.

8

The storing step of claim 1 requires "storing a plurality of independent sets of filter coefficients in a memory, wherein each set of filter coefficients defines a different polyphase filter function ...". Accordingly, each of the independent sets of filter coefficients being stored in claim 1 provides a different polyphase filter function.

On the other hand, Suzuki stores "two sets of filter coefficients which are timewise apart from each other", and Suzuki performs interpolation between the two sets of filter coefficients to determine filter coefficients for additional timewise variations (see Suzuki, column 22 lines 46-53). This appears to mean that Suzuki stores two separate sets of filter coefficients where each set defines a different **single-phase** filter function (**not polyphase** filter function), and interpolates between the two separate sets to essentially generate a further set of filter coefficients that defines a further **single-phase** filter function (note that Suzuki never uses the term "polyphase"). Accordingly, Suzuki does not perform the step of "storing a plurality of independent sets of filter coefficients in a memory, wherein each set of filter coefficients defines a different polyphase filter function ...", as required by claim 1.

Claim 1 also requires "selecting one of the sets of filter coefficients" where the selected one of the sets is one of the "plurality of independent sets of filter coefficients [stored] in a memory, wherein each set of filter coefficients defines a different polyphase filter function". As mentioned above, it was asserted in the Office Action that column 23, lines 31-51 of Suzuki teaches this "selecting" step of claim 1. For the convenience of the Examiner, this portion of Suzuki is quoted verbatim below.

> The reason for obtaining filter coefficients on the basis of the difference spectrum characteristics between the two waveshapes is that while a tone signal corresponding to one original tone waveshape (e.g., the waveshape corresponding to the strong key touch) is obtained in the tone generator 18 (FIG. 2), a tone signal corresponding to the other original tone waveshape (e.g., the waveshape corresponding to the weak key touch) is to be obtained by applying filtering in accordance with the difference spectrum characteristic. In performing filtering according to the key touch, sets of filter coefficients corresponding to several orders of key touch strength may be prepared instead of preparing sets of filter coefficients corresponding to all orders of key touch strength and a filter coefficient corresponding to an unprepared key touch strength may be obtained similarly by interpolation.

9

Not only filter coefficients corresponding to the key touch but also filter coefficients corresponding to various factors including the tone pitch (or tone range) and tone color kind are prepared in a similar manner

The above quoted portion of Suzuki (i.e., column 23, lines 31-51) appears to teach that a different set of filter coefficients can be stored for each of a plurality of different key touch strengths, tone pitches and tone colors. For example, a first set of filter coefficients can be stored for a waveshape corresponding to a strong key touch, and a second set of filter coefficients can be stored for a waveshape corresponding to a soft key touch. Then, if a medium key touch is detected, interpolation can be used to prepare a further set of filter coefficients (corresponding to the medium key touch) using the first and second sets of filter coefficients (corresponding to the strong and week key touches). However, this is quite different from what is being claimed, for at least the following reasons.

First of all, Suzuki is not selecting only one of a plurality of independent sets of filter coefficients (and then interpolating the one selected set of filter coefficients to thereby produce an interpolated selected filter coefficients), as is required by claim 1. In other words, Suzuki does not select a single set of multiple sets of filter coefficients, and then perform interpolating of the selected single set. Rather, Suzuki selects at least two sets of filter coefficients (e.g., one corresponding to a strong key touch and one corresponding to a soft key touch) and perform interpolation between the first and second sets to generate a third set of filter coefficients (e.g., one corresponding to a medium key touch). This, is quite different from what is required by claim 1.

Further, Suzuki is not selecting only one of a plurality of independent sets of filter coefficients "wherein each set of filter coefficients defines a different **polyphase** filter function", as required by claim 1. In fact, as mentioned above, Suzuki never even uses the term "polyphase". This is because each set of filter coefficients in Suzuki appears to define a single-phase filter function. Thus, if for arguments sake Suzuki is selecting one of a plurality of independent sets of filter coefficients (which Applicants do not believe is the case), Suzuki would at best be selecting one of a plurality of independent sets of filter coefficients wherein each set of filter coefficients defines a different **single-phase** filter function, which is quite different from what is required by claim 1.

10

For at least the reasons specified above, Applicants respectfully request that the 103(a) rejection of claim 1 be reconsidered and withdrawn. Further, Applicants assert that Adams, Konishi, Auld and Thompson, alone or in combination do not teach the deficiencies of Suzuki discussed above.

Claims 2, 5-9, 24 and 27 depend from and add additional features to claim 1. Applicants respectfully assert that these claims are patentable for at least the reason that they depend from claim 1, as well as for the features that they add.

Claim 10, as amended, is believed to be patentable over the cited references for similar reasons to at least some of the reasons discussed above with regards to claim 1. Accordingly, Applicants respectfully request that the rejection of claim 10 be reconsidered and withdrawn. **Claims 11, 12, 15, 16, 19-21, 25 and 28** depend from and add additional features to claim 10. Applicants respectfully assert that these claims are patentable for at least the reason that they depend from claim 10, as well as for the features that they add.

Claim 22, as amended, is believed to be patentable over the cited references for similar reasons to those discussed above with regards to claim 1. Accordingly, Applicants request that the rejection of claim 22 be reconsidered and withdrawn. **Claims 23, 26 and 29** depend from and add additional features to claim 22. Applicants respectfully assert that these claims are patentable for at least the reason that they depend from claim 22, as well as for the features that they add.

III. Conclusion

In light of the above, it is respectfully requested that all outstanding rejections be reconsidered and withdrawn. The Examiner is respectfully requested to telephone the undersigned if he can assist in any way in expediting issuance of a patent.

The Commissioner is authorized to charge the required fees and any underpayment of fees or credit any overpayment to Deposit Account No. 06-1325 for any matter in connection with this reply, including any fee for extension of time, which may be required.

Respectfully submitted,

Date: June 16, 2009   By: /Jeffrey R. Kurin/
                                           Jeffrey R. Kurin
                                           Reg. No. 41,132

Fliesler Meyer LLP
650 California Street, 14th Floor
San Francisco, California 94108
Telephone: 415/362-3800
Facsimile: 415/362-2928
Customer No. 23910